

## ENVIRONMENTAL CALIBRATION CHAMBER OPERATIONS

by

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The Office has thermal vacuum capabilities that are provided for use by Code 600 personnel in the development, calibration, and functional operation checks of flight sensors, sources, and laboratory and field instruments. Two systems are available. The first is a 46 cm diameter diffusion-pumped vacuum chamber of the bell jar variety. It has an internal thermal shroud, LN2 cold trap, two viewing ports, and various electrical and fluid feedthroughs. The other, also an oil diffusion-pumped system, consists of a 1.8 meter diameter by 2.5 meter long stainless steel vacuum tank, associated pumping and control equipment, a liquid nitrogen storage and transfer system and internal IR/visible calibration sources. This is a two story system with the chamber located on one floor and the pumping/cryogenic systems located on the floor below.

### ACTIVITY SCHEDULE

<u>CODE</u>	<u>INSTRUMENT</u>	<u>DESCRIPTION</u>	<u>DATE</u>
673	SSBUV Flight Candidate Lamps	Environmental temperature characterization.	3/86
617	Cloud LIDAR	Functional test at flight pressure.	4/86
674	Multispectral Cloud Radiometer (MCR)	Pre-flight calibration of IR channel.	5/86
616	SSBUV Horizon Sensor	Instrument development	5/86
673	SSBUV Flight Calibration Lamps	Thermal soak in vacuum.	7/86 & 8/86

<u>CODE</u>	<u>INSTRUMENT</u>	<u>DESCRIPTION</u>	<u>DATE</u>
674	MCR	Pre-flight IR calibration	9/86
674	Thermalert II Sensor	IR Calibration	11/86
674	MCR	Post-flight IR calibration	12/86
671	PRT 5 (2)	Pre- and Post-flight temp. characterization	5/87 & 6/87
623	Telatep Tehmometer Gun	IR calibration	5/87
674	MCR	Pre- and Post-flight IR calibration	6/87 & 9/87